

Specifications — XPA 1002, XPA 2001 (XTRA) Series

Audio

Voltage gain	
XPA 1002.....	16x (24 dB)
XPA 2001-70V.....	57x (35 dB)
XPA 2000-100V.....	81x (38 dB)
Stereo channel separation.....	>75 dB @ 1 kHz
CMRR.....	75 dB @ 1 kHz (typical)

Audio input

Number/signal type.....	1 stereo or 2 mono, balanced/unbalanced
Connectors	(1) 3.5 mm captive screw connector, 5 pole
Impedance.....	>10k ohms unbalanced/balanced, DC coupled
Nominal level	+4 dBu (1.23 Vrms), balanced
Maximum level.....	+20 dBu (7.75 Vrms), balanced
Input sensitivity	
XPA 1002.....	+4 dBu (1.23 Vrms)
XPA 2001-70V, XPA-2001-100V	
	+4 dBu (1.23 Vrms) if driven by one input
	-2 dBu (0.615 Vrms) if both inputs are summed

NOTE 0 dBu = 0.775 Vrms, 0 dBV = 1 Vrms, 0 dBV ≈ 2 dBu

Audio output

Number/signal type	
XPA 1002.....	1 stereo, 4- or 8-ohm direct
XPA 2001-70V.....	1 mono, 70 V line
XPA 2001-100V.....	1 mono, 100 V line
Connectors	
XPA 1002.....	(1) 5 mm screw lock captive screw connector, 4 pole
XPA 2001-70V, XPA-2001-100V	
	(1) 5 mm screw lock captive screw connector, 2 pole

NOTE These connectors accept wires of 22 AWG to 12 AWG.

Load impedance	
XPA 1002.....	4 ohms minimum
XPA 2001-70V.....	25 ohms minimum
XPA 2001-100V.....	50 ohms minimum
Amplifier type	Class D
Output power	
XPA 1002.....	60 watts rms per channel, 8 ohms, 1 kHz, <0.05% THD 100 watts rms per channel, 4 ohms, 1 kHz, <0.05% THD
XPA 2001-70V.....	200 watts rms, 70 V, 1 kHz, <0.1% THD
XPA 2001-100V.....	200 watts rms, 100 V, 1 kHz, <0.1% THD
Frequency response	20 Hz to 20 kHz, ±1 dB
THD + Noise	
XPA 1002.....	0.05% @ 20 Hz-20 kHz, 8 ohms, at 3 dB below clipping
XPA 2001-70V, XPA-2001-100V	
	<0.1% @ 1 kHz at 3 dB below clipping
S/N	
XPA 1002.....	105 dB, 20 Hz - 20 kHz, unweighted
XPA 2001-70V, XPA-2001-100V	
	100 dB, 20 Hz - 20 kHz, unweighted
Damping factor	
XPA 1002.....	>100 @ 8 ohms

Specifications — XPA 1002, XPA 2001 (XTRA) Series, cont'd

High pass filter

XPA 2001-70V, XPA-2001-100V

80 Hz, 12 dB per octave rolloff (switch selectable)

Control/remote — amplifier

Control port..... (1) 3.5 mm captive screw connector, 5 pole

Pin configurations

DC volume control (analog)

Pin 1 = +10 VDC, 50 mA (max.), pin 2 = volume/mute (variable voltage),
pin 3 = GND

Volume control voltage range

0 V (mute) to 10 V (maximum volume)

Standby power control (contact closure)

Pin 4 = GND, pin 5 = standby

General

Power..... 100 VAC to 240 VAC, 50/60 Hz, internal

Typical..... 26 watts (1/8 power [pink noise] at 8 ohms)

Quiescent..... 10 watts

Standby..... <1 watt (triggered by contact closure or after 1 hour with no signal)

Temperature/humidity..... Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing

Operating: +32 to +122 °F (0 to +50 °C) / 10% to 90%, noncondensing

Cooling..... Convection, no vents, with internal heat sinks

Thermal dissipation

Standby..... <1 watt (3 BTU/hr)

Idle..... 10 watts (34 BTU/hr)

1/8 power (pink noise)..... 4 ohms (x2): 14 watts

8 ohms (x2): 14 watts (48 BTU/hr)

70 V (XPA 2001-70V): 14 watts (48 BTU/hr)

Protection..... Clip limiting, thermal, short circuit, DC output

Indication..... Limiter/Protect LED indicates the onset of clip limiting, thermal cycling,
short circuit, or DC output protection

Mounting

Rack mount..... Yes, with optional 1U, 9.5" deep rack shelf (RSU 129, #60-190-01;
RSB 129, #60-604-01)

Enclosure type..... Metal

Enclosure dimensions..... 1.7" H x 8.7" W x 9.5" D (1U high, half rack wide)
(4.3 cm H x 22.1 cm W x 24.1 cm D)

Product weight..... 2.5 lbs (1.1 kg)

Shipping weight..... 5 lbs (3 kg)

Vibration..... ISTA 1A in carton (International Safe Transit Association)

Regulatory compliance

Safety..... CE, CUL, UL

UL rated for use in plenum airspaces: meets UL 2043 for heat and smoke
release; meets UL 60065, IEC 60065, and BSEN 60065 for A/V equipment.

EMI/EMC..... CE, CISPR 22 Class B, C-tick, FCC Class B, ICES, VCCI Class B

Environmental..... Complies with the appropriate requirements of CEC, ENERGY STAR®
(ENERGY STAR® qualified amplifier), EU code of conduct, RoHS, WEEE

MTBF..... 250,000 hours

Warranty..... 3 years parts and labor

NOTE All nominal levels are at $\pm 10\%$.

NOTE Specifications are subject to change without notice.

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